**Interaction: alert, prompt, confirm**

**[alert](https://javascript.info/alert-prompt-confirm" \l "alert)**

Syntax:

alert(message);

This shows a message and pauses the script execution until the user presses “OK”.

For example:

alert("Hello");

The mini-window with the message is called a *modal window*. The word “modal” means that the visitor can’t interact with the rest of the page, press other buttons etc, until he deals with the window. In this case – until he presses “OK”.

**[prompt](https://javascript.info/alert-prompt-confirm" \l "prompt)**

Function prompt accepts two arguments:

result = prompt(title[, default]);

It shows a modal window with a text message, an input field for the visitor and buttons OK/CANCEL.

**title**

The text to show to the visitor.

**default**

An optional second parameter, the initial value for the input field.

The visitor may type something in the prompt input field and press OK. Or he can cancel the input by pressing a CANCEL button or hitting the Esc key.

The call to prompt returns the text from the field or null if the input was canceled.

For instance:

let age = prompt('How old are you?', 100);

alert(`You are ${age} years old!`); // You are 100 years old!

**IE: always supply a default**

The second parameter is optional. But if we don’t supply it, Internet Explorer would insert the text "undefined" into the prompt.

Run this code in Internet Explorer to see that:

let test = prompt("Test");

So, to look good in IE, it’s recommended to always provide the second argument:

let test = prompt("Test", ''); // <-- for IE

**[confirm](https://javascript.info/alert-prompt-confirm" \l "confirm)**

The syntax:

result = confirm(question);

**Function confirm shows a modal window with a question and two buttons: OK and CANCEL.**

**The result is true if OK is pressed and false otherwise.**

For example:

let isBoss = confirm("Are you the boss?");

alert( isBoss ); // true if OK is pressed

**[Summary](https://javascript.info/alert-prompt-confirm" \l "summary)**

We covered 3 browser-specific functions to interact with the visitor:

**alert**

shows a message.

**prompt**

shows a message asking the user to input text. It returns the text or, if CANCEL or Esc is clicked, all browsers except Safari return null.

**confirm**

shows a message and waits the user to press “OK” or “CANCEL”. It returns true for OK and false for CANCEL/Esc.

All these methods are modal: they pause the script execution and don’t let the visitor to interact with the rest of the page until he dismisses them.

There are two limitations shared by all the methods above:

1. The exact location of the modal window is determined by the browser. Usually it’s in the center.
2. The exact look of the window also depends on the browser. We can’t modify it.

That is the price for simplicity. There are other ways to show nicer windows and richer interaction with the visitor, but if “bells and whistles” do not matter much, these methods work just fine.

**Questions and Exercises**

1. Modify the programs from the last handout to allow the user to enter the dimensions of each shape as well as the initial investment, interest rate and number of years.
2. Create a program that allows a user to calculate their BMI (body mass index...google “how to calculate bmi”).